LISTING OF THE CLAIMS:

Claim 1 (Currently Amended): A process for the production of food-grade phosphoric acid by ~~the~~ crystallization of phosphoric acid hemihydrate, H_3PO_4 x 0.5 H_2O, from a prepurified feed acid, ~~wherein the feed acid used for the crystallization is purified by the following steps~~ comprising:

purifying the feed acid used for crystallization by the following steps a, b and c:

a) after ~~the~~ a froth-flotation step of a phosphate concentrate, the concentrate is directed to a strongly magnetic separation step for the decreasing of ~~the~~ an Mg ion amount,

b) the phosphate concentrate is leached in a mixture of sulfuric acid and phosphoric acid according to ~~the~~ a wet process, ~~the~~ precipitated SO_4 and As ions are removed, and a source of silicon is added in order to adjust ~~the~~ an F/Si molar ratio to < 6,

c) the phosphoric acid is concentrated, ~~the~~ a solids precipitate is removed and ~~the~~ F ions are evaporated, and

d) the feed acid obtained from step c, having a concentration of > 58 wt.% P_2O_5, a solids concentration of < 0.05 wt.%, an Mg ion concentration of < 1.5 wt.%, an SO_4 ion concentration of < 1 wt.%, an As ion concentration of < 8 ppm, and an F ion concentration of < 0.2 wt.%, is crystallized at a steady crystal growth rate of < 10 μm/min, corresponding to < 25 wt.% crystals/hour, when seed crystals are added in an amount of at maximum 2 wt.% in the form of a 40 wt.% crystal slurry, in which ~~the~~ an Fe ion concentration is < 500 ppm and seed crystal size is < 200 μm, the temperature difference ~~being~~ in ~~the~~ a first crystallization being < 17 °C, and the crystals are washed with ~~the~~ an undersaturated mother liquor of ~~the~~ a subsequent recrystallization step,

e) the phosphoric acid crystallized in step d is melted, diluted to a concentration of < 63 wt.% P_2O_5, seed crystals are added, and crystallization is carried out as in step d, the

temperature difference being < 8 °C, and the crystals are washed with an undersaturated solution of phosphoric acid, and

f) optionally the phosphoric acid crystallized in step e is melted, diluted to a concentration of < 63 wt.% P_2O_5, seed crystals are added, and crystallization is carried out as in step d, the temperature difference being < 6 °C, and the crystals are washed with an undersaturated washing solution prepared from product crystals.

Claim 2 (Previously Presented): A process according to Claim 1, wherein the process comprises one recrystallization step e.

Claim 3 (Previously Presented): A process according to Claim 1, wherein the process comprises two recrystallization steps e and f, the crystals of step e being washed with an undersaturated mother liquor obtained from the subsequent recrystallization step f.

Claim 4 (Previously Presented): A process according to Claim 1, wherein the mother liquor of the first crystallization step d is separated as a fodder-grade phosphoric acid.

Claim 5 (Previously Presented): A process according to Claim 1, wherein the acid crystallized in steps e and/or f is melted and diluted to food-grade phosphoric acid.

Claim 6 (Previously Presented): A process according to Claim 1, wherein the crystallization step of the process is implemented as a batch process or a continuous-working process.

Claim 7 (Previously Presented): A process according to Claim 1, wherein the mother liquors of recrystallization steps e and/or f are recycled as feed acid to the same and/or preceding step.

Claim 8 (Currently Amended) A process according to Claim 1, wherein a magnetic flux density of at minimum 1 Tesla~~, preferably 1-3 Tesla,~~ is used in step a.

Claim 9 (Previously Presented): A process according to Claim 1, wherein in the crystallization steps of the process the viscosity of the crystal slurry is < 2000 cP.

Claim 10 (Currently Amended) A process according to Claim 1, wherein in crystallization step d the concentration of the feed acid is < 61 wt.% P_2O_5, the Mg ion concentration is < 1.2 wt.% Mg, and the F ion concentration is < 0.18 wt.%.

Claim 11 (New) A process according to claim 8, wherein a magnetic flux density of 1-3 Tesla is used in step a.